

## **Justification of Selected Route of the Transmission Lines**

Out of many alternative routes, most suitable and techno-economically route has been selected considering the following parameters;

- 1.0 The selected route is so close in proximity of the bee- line as far as practicable.
- 2.0 Minimum loss of forest, endangered flora and fauna, rich orchard, nurseries etc.
- 3.0 Optimal no. of angle points by avoiding multiple crossings of the same transmission line, minimum no. of railway / power line / river / road / canal crossings.
- 4.0 Avoidance of waterlogged / marshy land, area with collapsible soil strata, densely populated areas, air funneling pathway of Defense Aerodrome / civil airport, religious monuments, heritage sites and other sensitive areas.
- 5.0 The distance between consecutive angle points is so kept in order to optimize no. of intermediate suspension towers.
- 6.0 All the River crossings have been carefully selected considering stability of soil strata at individual tower pile foundation location and after exploring possibility of crossing the river using DD type tower / with extra high extension +18/+25.
- 7.0 Accessibility of the transmission line towers along the route for maintenance point of view.

List of transmission lines tabulated below for reference.

1. 765kv SC Mainpuri – Unnao Transmission Line	192 km	
2. 400kv DC Mainpuri – Aligarh Transmission Line	93 km	
3. LILO of both circuits of 400kv DC Orai – Mainpuri (PG) at Mainpuri Transmission Line	43.3 km	
4. 765kv S/C Mainpuri – Bara Transmission Line	362 km	
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6. LILO of 400kv Panki – Obra at 400kv Rewa Road Transmission Line	0.8 km	
7. 400kv DC Rewa Road – Karchhana Transmission Line	29.2 km	
8. 400kv DC Rewa Road – Meja Transmission Line	33.5 km	
9. 400kv DC Bara – Meja Transmission Line	29.2 km	
10. 400kv DC Bara – Karchhana) Transmission Line	39.5 km	
11. 400kv DC Tanda – Gonda Transmission Line	95 km	
12. 400kv DC Gonda – Shahjahanpur) Transmission Line	220 km	
13. LILO of 400kv Sarojininagar – Kursi Road at 400kv Sultanpur Road, Lucknow Transmission Line	6.5 km	
14. LILO of 400kv Obra – Sultanpur at 400kv Aurai Transmission Line	1.2 km	